

REVIEWS

The Grasses of Baja California, Mexico. By FRANK W. GOULD and REID MORAN. Memoir 12, San Diego Soc. Natural History. 1981. 140 p.

This work is evidently Frank Gould's last agrostological publication, and appeared after his death, the manuscript being completed by Dr. Moran. The work includes a brief introduction to the phytogeography of Baja California, discussion of previous collectors, and several illustrations of grass structure. The system of classification used is basically that of Stebbins and Crampton. The work includes a modern segmented artificial key to genera which should be much simpler to use than the traditional Hitchcock keys. Rather full generic and species descriptions are given, as well as at least one illustration for each genus. The illustrations are mostly from previous publications, largely those of the Hitchcock group, as well as from Gould and Box and others. Some Spanish common names are stated and, regretfully, so are a certain number of the pedantic "standardized plant names" espoused by U.S. bureaucrats. "Woolspike balsam-scale," stated on page 130 for *Elyonurus barbiculmis* is one example. I don't believe that anyone could persuade a Mexican *paisano* or U.S. cowboy to use such monstrosities.

Descriptions of subfamilies and tribes are absent, although the work is arranged in a systematic order. The name "Eragrostoideae" should be replaced by the earlier "Chloridoideae" (Butzin, Wildenowia 7:116. 1973). There are few nomenclatural innovations with the exception of the use of the name *Dichanthelium* at the generic level, a treatment that some agrostologists feel is unrealistic. The binomial *Bromus uniolooides* H.B.K. should be replaced by *B. catharticus* Vahl (Pinto-Escobar in Caldesia 11:54, 9–16). The common Para grass, given as *Brachiaria purpurascens* (Raddi) Henr. should be *B. mutica* (Forsk.) Stapf; the epithet *mutica* (1775) has nearly a 50-year priority over Raddi's *purpurascens* (1823). The text lists no bambusoid grasses, which may be due to the desert nature of much of the peninsula. It seems likely, though, that some cultivated bamboos would occur.—R. W. POHL, Dept. of Botany, Iowa State Univ., Ames 50011.

A Flora of Waterton Lakes National Park. By JOB KUIJT. 684 p. The University of Alberta Press, Edmonton, Alberta, Canada T6G 2E8. \$15.00 paperback; \$25.00 hardcover. ISBN 0-88864-065-X.

In an age of computers and genetic engineering, the production of a standard flora is still a good, solid achievement. Floras are the cornerstones of biogeography and systematics, and the cataloging process, begun in the 18th century, is still not completed. Each is a synthesis of invisible work by many people over many years: collections, illustrations, revisions, keys, and so on.

This flora represents the best of our taxonomic tradition and is a beautiful work. One might have thought that Job Kuijt, for all his efforts on *Ioranths*, *viscads* et al., would scarcely have found the time to produce a full-scale flora; though he acknowledges a debt to the earlier catalogues of August Breitung, credit for completion of the task must go to Kuijt. The families are sensibly arranged alphabetically, botanical terminology is simplified, and nearly every species is illustrated by a simple habit drawing done by the author (except for *Salix*, which is adapted from the work of T. C. Brayshaw).

Waterton Lakes National Park is in southern Alberta, directly north of Glacier National Park in the U.S. It covers 204 mi², and yet 55% of the flora of the entire province is represented within its boundaries. Part of the reason for this is probably the southern

position of the park, compared with the increasingly depauperate northern Alberta and plains flora. But the park is so tiny compared to the rest of the province that this cannot possibly be a sufficient explanation. Kuijt mentions the enigmatic "botanical watershed" at ca. 50°N, and north of the park boundary, where species richness apparently decreases abruptly. An additional mystery is the significant number of species absent from the park but found to the north and south. Kuijt suggests that glacial history and the peculiar climatic conditions of the area may account for this disjunction without being able to explain why.

I would like to have seen a few more figures on the total flora of the park, the percent of endemism, and the floristic relationships included with the discussion of vegetation types and geology.

Because so many of the plants in the park also occur in south central Idaho, an area I know fairly well, I walked through a few of the keys and compared them with those in the Flora of the Pacific Northwest and the Intermountain Flora. They appear to be less technical in some respects but still are easy to follow. Difficult groups still yield difficult keys: *Carex* (70 spp.) and *Salix* (21 spp.). A master key to the families is given. Rounding off the treatments are a glossary, bibliography, and index to common and Latin names.—C. DAVIDSON, Idaho Botanical Garden, P.O. Box 2140, Boise 83701.

Imágenes de la Flora Quintanarroense. By OSWALDO TÉLEZ VALDÉS and MARIO SOUSA SÁNCHEZ. 224 p., 160 color photographs, 5 plates of line drawings. Centro de Investigaciones de Quintana Roo, S.A. and Instituto de Biología de UNAM. \$800 pesos, plus postage. 1982. Paper.

This volume is the result of an investigation instigated to provide a better knowledge of the plant resources of Quintana Roo, Yucatan, México. Intensive field work, on the part of the authors and field assistants, was initiated in January 1980, and concluded in April 1981. This overview of the plants of the area treats 116 of the more than 1300 species reported for Quintana Roo. For each species, in addition to the scientific name and family, are included vernacular names, both Spanish and Mayan, when these are known. The text is comprised of adequate descriptions, general distributions, habitats in Quintana Roo, and uses. For certain species, biological aspects are also mentioned. The excellent color plates are an outstanding feature of the work, most of them taken by Biol. Téllez Valdés. For many species there is not only a close-up of the flower and/or fruit, but also of the habit and sometimes the habitat.

In addition to the major section devoted to the flora, the volume contains a chapter on vegetation types, as set forth by Miranda in his 1959 paper, "La Vegetación de la Península Yucateca." This includes species lists for various vegetation types. The Glossary is accompanied by five pages of line drawings which serve to clarify certain terms. Literature cited and three indices (one to scientific names, one to common names, and the third to uses) conclude the volume.

Although this volume treats only a small portion of the plants of Quintana Roo, it gives an excellent image of the vegetation of this warm, subhumid part of Mexico. The coldest month is January, with an average temperature of 23°C; and the warmest months are July and August, with average temperatures of 27.8°C. Mean annual precipitation is 1300 mm. Inasmuch as many of the plants occur outside of Yucatan, the book has a wide potential use. It may be obtained from the offices of Centro de Investigaciones de Quintana Roo, S.A.: Puerto Morelos, Q.R., Apartado Postal 886, Cancun, Q.R. México, or Moctezuma No. 134, Colonia del Carmen, Delegación Coyoacán, México D.F. 04100, México.—ANNETTA CARTER, Dept. of Botany, Univ. California, Berkeley 94720.

Basin and Range. JOHN MCPHEE. Farrar, Straus and Giroux, New York. 1981. 216 p.

As a gift I received a volume with the textbookish title of *Basin and Range*. After